PTO/SB/08a (09-08)
Approved for use through 10/31/2008. OMB 0651-0031
formation Disclosure Statement (IDS) Filed
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | Application Number | | 10781951 | |
|---|------------------------|-------|------------|--|
| SUPPLEMENTAL | Filing Date | | 2004-02-18 | |
| INFORMATION DISCLOSURE | First Named Inventor | J. Wa | Walton | |
| STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99) | Art Unit | | 2416 | |
| (Not for Submission under 37 CFR 1.59) | Examiner Name | ALIA, | CURTIS A | |
| | Attorney Docket Number | | 040235 | |

| U.S.PATENTS | | | | | | | |
|----------------------|------------|---------------|---------------------------|------------|---|--|--|
| Examiner Initial* | Cite No | Patent Number | Kind Code ¹ | Issue Date | Name of Patentee or Applicant of cited Document | Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear | |
| | 1 | 6198775 | | 2001-03-06 | Khayrallah et al. | | |
| | 2 | 6314147 | | 2001-11-06 | Liang, et al. | | |
| | 3 | 6486828 | | 2002-11-26 | Cahn, et al. | | |
| | 4 | 6711124 | | 2004-03-23 | Khayrallah et al. | | |
| | 5 | 6711528 | | 2004-03-23 | Dishman, et al. | · | |
| | 6 | 6788661 | | 2004-09-07 | Ylitalo, et al. | | |
| · | 7 | 6801790 | | 2004-10-05 | Rudrapatna | | |
| | 8 | 6816555 | | 2004-11-09 | Sakoda | · | |

Application Number 10781951 Filing Date SUPPLEMENTAL 2004-02-18 INFORMATION DISCLOSURE First Named Inventor J. Walton STATEMENT BY APPLICANT Art Unit 2416 (Not for submission under 37 CFR 1.99) **Examiner Name** ALIA, CURTIS A Attorney Docket Number 040235

| | | | | T | *** | |
|---|-------------|---------|--|------------|--------------------|---|
| | 9 | 6862271 | | 2005-03-01 | Medvedev, et al. | |
| | 10 | 6940917 | | 2005-09-06 | Menon, et al. | |
| | 11 | 6982946 | | 2006-01-03 | Wiberg, et al. | |
| | 12 | 7020490 | | 2006-03-28 | Khatri | |
| | 13 | 7079870 | | 2006-07-18 | Vaidyanathan | |
| | 14 | 7194042 | | 2007-03-20 | Walton, et al. | |
| | 15 | 7200631 | | 2007-04-03 | Mailaender, et al. | · |
| | 16 | 7227906 | | 2007-06-05 | Fukuda, et al. | |
| | 17 | 7359466 | | 2008-04-15 | Huang, et al. | |
| | 18 | 7447268 | | 2008-11-04 | Sadowsky, et al. | |
| If you wish to add additional U.S. Patent citation information please click the Add button. | | | | | | |
| U.S.PATENT APPLICATION PUBLICATIONS | | | | | | |

Application Number 10781951 SUPPLEMENTAL Filing Date 2004-02-18 INFORMATION DISCLOSURE First Named Inventor J. Walton STATEMENT BY APPLICANT Art Unit 2416 (Not for submission under 37 CFR 1.99) **Examiner Name** ALIA, CURTIS A Attorney Docket Number 040235 1220506 EP 2002-07-03 Kabushiki Kaisha Toshiba Mitsubishi Electric Info. 2 1396956 EP 2004-03-10 Technology Centre RU 2111619 3 1998-05-20 Kvehlkomm Inkorporejted

4 2116698 RU 1998-07-27 Fuba Automotive Gmbkh wo 5 02078211 2002-10-03 Qualcomm Incorporated 6 04038984 wo 2004-05-06 Qualcomm Incorporated 04038985 WO 2004-05-06 Qualcomm Incorporated If you wish to add additional Foreign Patent Document citation information please click the Add button **NON-PATENT LITERATURE DOCUMENTS** Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item Examiner Cite (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), **T**5 Initials* No publisher, city and/or country where published. WRITTEN OPINION-PCT/US05/005261, INTERNATIONAL SEARCH AUTHORITY-EUROPEAN PATENT OFFICE, 1 6/16/05 INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY-PCT/US05/005261, INTERNATIONAL 2 PRELIMINARY EXAMINATION AUTHORITY-ALEXANDRIA, VIRGINIA, US, 09/30/06

Application Number 10781951 SUPPLEMENTAL Filing Date 2004-02-18 **INFORMATION DISCLOSURE** First Named Inventor J. Walton STATEMENT BY APPLICANT Art Unit 2416 (Not for submission under 37 CFR 1.99) **Examiner Name** ALIA, CURTIS A Attorney Docket Number 040235

| | 3 | AGUSTIN ET AL., "LDC CONSTRUCTION WITH A DEFINED STRUCTURE,"VEHICULAR TECHNOLOGY CONFERENCE, XP010700754, OCTOBER (2003) | |
|-------------|---------|---|--|
| | 4 | B.M HOCHWALD ET AL., "SYSTEMATIC DESIGN OF UNITARY SPACE-TIME CONSTELLATIONS,"IEEE TRANS. ON IT, VOL.46, NO.6, SEPTEMEBR 2000. | |
| | 5 | CROW, I.: "The Fourier Matrix," 4/27/01, http://www.maths.abdn.ac.uk/~igc/tch/mx4002/notes/node91.html, pages 1-3 | |
| | 6 | DAMMANN, et al., "Beamforming in Combination with Space-Time Diversity for Broadband OFDM Systems," IEEE International Conference on Communications, 2002. ICC 2002. New York, NY, April 28-May 2, 2002, Vol. 1, pp. 165-171. | |
| | 7 | KAISER, "Spatial Transmit Diversity Techniques for Broadband OFDM Systems," IEEE Global Telecommunications Conference, 2000. GLOBECOM '00. San Francisco, CA, Nov. 27-Dec. 1, 2000, Vol. 3, pp. 1824-1828. | |
| | 8 | NARULA, et al., "Performance Limits of Coded Diversity Methods for Transmitter Antenna Arrays," IEEE Transactions on Information Theory, Vol. 45, No. 7, Nov. 1999, pp. 2418-2433. | |
| | 9 | PAN, et al., "Dynamic Sub-channel Allocation with Adaptive Beamforming for Broadband OFDM Wireless Systems," IEEE Global Telecommunications Conference, 2002. GLOBECOM '02. Taipel, Taiwan, Nov. 17-21, 2002, New York, NY, Nov. 17, 2002, Vol. 1, pp. 711-715. | |
| | 10 | T.L. MARZETTA, B. HASSIBI, B.M HOCHWALD, "STRUCTURED UNITARY SPACE-TIME AUTOCODING CONSTELLATIONS," IEEE TRANS. ON IT, VOL.48, NO.4, APRIL 2002. | |
| | 11 | IEEE Std. 802.11a-1999, Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications, Amendment 1: High-Speed Physical Layer in the 5 GHz Band | |
| - | 12 | IEEE Std. 802.11g-2003, Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications, Amendment 4: Further Higher Data Rate Extension in the 2.4 GHz Band | |
| If you wish | n to ac | dd additional non-patent literature document citation information please click the Add button | |